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Elektrichestvo, 8, 1-10, Ag 1955

Card 2/2      Pub. 27 - 1/15

Institution : Moscow Power Engineering Institute im. Molotov

Submitted : Ap 15, 1955

Venikov, V. A.

AID P - 4093

Subject : USSR/Electricity

Card 1/2 Pub. 27 - 4/24

Authors : Venikov, V. A., Doc. Tech. Sci., Prof., and I. V. Litkens, Kand. Tech. Sci.

Title : The influence of excitation regulation on the capacity of long distance electric transmissions.

Periodical : Elektrichestvo, 11, 15-26, N 1955

Abstract : The article describes a method of analytical investigation of static and dynamic stability of long-distance electric transmission lines. The method was developed at the Moscow Power Engineering Institute and carried out on a dynamic model built by the Institute. The model was used to test various types of excitation regulators and of automatic regulation of excitation of synchronous condensers. Difficulties with the maintenance of static stability would have required condenser ratings several times exceeding the transmitted

AID P - 4093

Elektrichestvo, 11, 15-26, N 1955

Card 2/2      Pub. 27 - 4/24

power. This is avoided by the use of automatic excitation regulation on the condensers (without intensivity zone) acting on voltage deviation, angle of lead or current deviation. This enables using synchronous condensers of a rating not exceeding 0.25 of the transmitted power. The authors present the equations developed for the system and in an appendix present mathematical correlations characterizing the method of calculation. Three appendixes, 17 oscillograms and diagrams, 8 Soviet references (1940-1955).

Institution : Moscow Power Engineering Institute im. Molotov

Submitted : J1 18, 1955

VENIKOV, V. A. and LITKENS, I. V.

"Experimental and Analytical Investigation of Power System Stability with Automatically Regulated Generator Excitation," paper presented at the International Conference on Large Electric Systems and High Tensions, Paris, 30 May-9 June, 1956.

Translation in Branch 5

VENIKOV, Valentin Andreyevich; IVANOV-SMOLENSKIY, Aleksey Vladimirovich;  
YEZHKOVA, V.V., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor

[Use of models in designing electric systems] Fizicheskoe modelirova-  
nie elektricheskikh sistem. Moskva, Gos. energ. izd-vo, 1956. 358 p.  
(Electric engineering) (MIRA 9:12)

VENIKOV, V.A.

CHILKIN, H.G.; MESHKOV, V.V.; GOLUBTSOVA, V.A.; SIROTINSKIY, L.I.; ~~VENIKOV, V.A.~~  
ZOLOTAREV, T.L.; KONFEDERATOV, I.Ya.; SHNEYBERG, Ya.A.; ~~VESKLOVSKIY, O.N.~~

Professor L.D.Bel'kind. Elektrichestvo no.8:93-94 Ag '56. (MLRA 9:10)  
(Bel'kind, Lev Davidevich, 1896-)

VENIYEV, V.A., doktor tekhnicheskikh nauk, soobshchik; LITVINIS, I.V.,  
kandidat tekhnicheskikh nauk; ROMANOV, M.E., kandidat tekhnicheskikh  
nauk.

Increasing the capacity of large generators using strong excitation  
control. Vest.elektroprom. 27 no.9:9-15 S '56. (MIRA 10:9)

1. Moskovskiy energeticheskiy institut imeni V.M.Moileteva.  
(Electric generators) (Voltage regulators)

VENIKOV, V. A. (Dr. Tech. Sci.)

"Problems of Automatic Control of Electro-energetic Systems,"

paper read at the Session of the Acad. Sci. USSR, on Scientific Problems of Automatic  
Production, 15-20 October 1956.

Avtomatika i telemekhanika, No. 2, p. 182-192, 1957

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VENIKOV, V.A.  
VENIKOV, V.A., professor, redaktor

[Transmission processes and problems of stability in electric systems. Translated from the English] Perekhodnye protsessy i voprosy ustoychivosti v elektricheskikh sistemakh. Perevod statei pod red. V. A. Venikova. Moskva, Gos.energ.izd-vo, 1957. 30 p.  
(Electric power distribution) (MIRA 10:10)

VENIKOV, V.A.

PHASE I BOOK EXPLOITATION

284

Soveshchaniye elektrikov po voprosu proyektirovaniya elektricheskoy chasti gidrostantsiy, Moscow, 1956

Novoye v proyektirovaniye elektricheskoy chasti gidroelektrostantsiy (Materialy soveshchaniya po proyektirovaniyu i ekspluatatsii) (New Developments in the Design of Electric Equipment for Hydro-electric Power Plants (Data of the Conference on Design and Operation)) Moscow-Leningrad, Gosenergoizdat, 1957, 222 p. 4,500 copies printed.

Sponsoring agencies (of Conference): Vsesoyuznyy trest po proyektirovaniyu gidroelektrostantsiy i gidroelektrouzlov; Moskovskoye otdeleniye nauchno-tekhnicheskogo obschestva energopromyshlennosti, Moskovskiy energeticheskiy institut.

Ed.: Demkov, Ye. D.; Tech. Ed.: Fridkin, A.M.; Ed. of the Collection: Kheyfits, M.E., Engineer.

PURPOSE: These collected reports are addressed to engineers engaged in the design, construction, operation and maintenance of electric power plants, as well as to students at power

Card 1/9

New Developments in Design of Electric Equipment (Cont.) 284

engineering and electrical engineering vuzes.

COVERAGE: A conference of electrical engineers engaged in the design, construction, operation and maintenance of hydroelectric power plants and electric power distribution systems was held in Moscow from May 16th to May 24, 1956. The conference was organized by Gidroenergoprojekt (All-Union Trust for the Design and Planning of Hydroelectric Power Plants and Developments) in collaboration with MONTOP (Moscow Branch of the Scientific and Technical Society of the Electrical Industry) and the Moskovskiy energeticheskiy insitut (Moscow Power Engineering Institute). Several related design organizations, as well as the Ministries of the Electrical Industry, of Electric Power Plants and of Electric Power Plant Construction also participated. The reports in this collection reflect the latest views on the design and planning of the electrical equipment of hydroelectric stations and on their requirements for equipment. Special attention is given to problems of automation and remote control of stations and systems. These reports are concerned to a very great extent with the description and appraisal of considerable quantities of

Card 2/9

New Developments in Design of Electric Equipment (Cont.) 284

Soviet-produced electrical equipment. There is a list of Soviet personalities and organizations which took part in the conference (pp. 205-215). In several of the reports reference is made to Soviet power engineers who have made important contributions in the field. There are 34 references, of which 27 are Soviet (pp. 157, 169, 197 and 205), three English, two Italian, one French and one Swedish (p. 196).

TABLE OF  
CONTENTS:

Preface	3
Uspenskiy, B.S. Recent Trends in the Design of Electrical Equipment for Hydroelectric Power Plants in the USSR	5
Antoshin, N.N. Some Special Features of the Electrical Equipment of Foreign Hydroelectric Power Plants	14
Venikov, V.A. Recent Trends in Stability Problems in Long-Distance Electric Power Transmission	19
Card 3/9	

New Developments in Design of Electric Equipment (Cont.)	284
Grudinsky, P.G. Fault Analysis in 110 to 220-kv Power Switchboards and Conclusions for Design Purposes	29
Lisovskiy, G.S. Main Electrical Connection Systems for Hydroelectric Power Plants	35
Chumburidze, I.P. Main Electrical Connection Systems for Hydroelectric Power Plants and Substations	44
Karaulov, A.A. Alternating Current Requirements for Auxiliary Power System of a Hydroelectric Power Plant	50
Nikolayshvili, M.S. Alternating Current Plant Auxiliary Power Systems for Medium Capacity Hydroelectric Power Plants	58
Kheyfets, I.D. Standard Open-type Switching Structures for 35 to 220-kv Hydroelectric Power Plants	61
Zlobina, V.I. Electrical Equipment of Run-of-River Hydroelectric Power Plant Structures of Standard Design	69

Card 4/9

New Developments in Design of Electric Equipment (Cont.) 284	
Gogus, L.K. New Standard 35 and 110-kv Stepdown Substations	77
Dvoskin, L.I. New Designs in 6 to 110-kv Enclosed-type Switching Structures and in 35 to 400-kv Open-type Switching Structures	91
Bykov, G.P. Observations on the Design of the Electrical Equipment of the Kakhovka Hydroelectric Power Plant	93
Oranskiy, I.N. The Electrical Equipment of Hydroelectric Power Plants Built on Irrigation Canals	95
Shakhov, G.V. Experience in Operating the Electrical Equipment of the Krasnopolyanskaya Hydroelectric Power Plant	102
Men'shikov, S.V. Experience in Operating the Electrical Equipment of the Lenenergo System Hydroelectric Power Plant	103

Card 5/9

New Developments in Design of Electric Equipment (Cont.)	284
Makeyev, M. Ye. Experience in Operating the Dubossary Hydroelectric Power Plant	105
Ratsbaum, V.D. Experience in Operating the Electrical Equipment of the Farkhad Hydroelectric Power Plant	106
Kazaryan, A.A. The Electrical Equipment of the Tsimlyanskaya Hydroelectric Power Plant	108
Tsetlin, B.M. The Electrical Equipment of the Knyazhaya Guba Hydroelectric Power Plant	109
Kalina, M.F. Observations on the Design of the Ust'-Kamennogorsk Hydroelectric Power Plant	111
Zarkhi, M.I. Experience in Operating the Electric Equipment of a Kolenergo System Hydroelectric Power Plant	113
Sakov, A.D. Over-all Station and Individual Unit Control Stations	116

Card 6/9

New Developments in Design of Electric Equipment (Cont.)	284
Khodnev, V.V. Assembled Panel Structures for Automatic Control and Protection of Hydroelectric Power Plants	118
Kheyfets, I.D. Direct Current Requirements of Hydroelectric Power Plant Auxiliary Power System	120
Uspenskiy, Yu. M. Hydroelectric Power Plant Relay Protection and Automation System Operating on Plant Alternating Current	126
Neyman, V.A. Assembly of Hydroelectric Power Plant Electrical Equipment and Requirements for Improving Planning and Estimates	131
Petrov, B.M. The Automation of Water Wheel Generator Units	133
Losyatinskiy, A.Z. Improving Design and Equipment of Water Wheel Generator Unit Automation Systems on the Basis of Experience in Operation, Maintenance and Adjustment	139

Card 7/9

New Developments in Design of Electric Equipment (Cont.)	284
Pokrovskiy, B.M. The Question of Doing Away with High-Speed Gates in Hydroelectric Power Plants	147
Rosman, L.V. Some Problems of Generator Excitation in Completely Automated Hydroelectric Power Plants	148
Krumina, V.A. Automation Devices at the Kegumskaya Hydroelectric Power Plant and Experience in Their Operation	158
Barkan, Ya. D. Possibilities of Automation of Voltage Control and of Reactive Load Distribution in Electric Power Systems	159
Fedorov, B.A. Main Tendencies in the Automation and Telemechanization of Electric Power Systems and Hydroelectric Power Plants	170
Derman, B.A. Hydroelectric Power Plant Staff and Operating Personnel	174
Antoshin, N.N. Assembled Switchboard Structures in the USSR and Other Countries	185
Card 8/9	

New Developments in Design of Electric Equipment (Cont.)	284
Ramendik, E.B. Standard Substations to Meet Temporary Electric Power Requirements at Hydroelectric Power Plant Construction Sites Synopsis of Addresses Made Concerning the Reports	205
Resolution Made by the Conference	215
List of Organizations Participating in the Conference	223

AVAILABLE: Library of Congress (TK1081.S651956)

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7-30-58

Card 9/9

ALEKSANDROV, A.G., dots; ARONOVICH, I.S., inzh.; BABIKOV, M.A., doktor tekhn.nauk; BATUSOV, S.V., kand.tekhn.nauk; BEL'KIND, L.D., doktor tekhn.nauk; VENIKOV, V.A., doktor tekhn.nauk; VESELOVSKIY, O.N., kand.tekhn.nauk; GOLOVAN, A.T., doktor tekhn.nauk; GOLUSTSOVA, T.A., doktor tekhn.nauk; GREYNER, L.K., inzh.; GRUDINSKIY, P.G., prof.; GUSEV, S.A., inzh.; DMOKHOVSKAYA, L.F., kand.tekhn.nauk; DROZDOV, N.G., doktor tekhn.nauk; IVANOV, A.P., doktor tekhn.nauk [deceased]; KAGANOV, I.L., doktor tekhn.nauk; KERBER, L.L., inzh.; KOCHENOVA, A.I., kand.tekhn.nauk.; LARIONOV, A.N.; MINOV, D.K., doktor tekhn.nauk; METUSHIL, A.V., doktor tekhn.nauk; NIKULIN, N.V., kand.tekhn.nauk; MILIDER, R.A., prof.; PAITYUSHIN, V.S., prof.; PASYMKOV, V.V., doktor tekhn.nauk; PETROV, G.N., doktor tekhn.nauk; POLIVANOV, K.M., doktor tekhn.nauk; PRIVEZHEITSEV, V.A., doktor tekhn.nauk; RADUNSKIY, L.D., inzh.; RENNE, V.T., doktor tekhn.nauk; SVENCHANSKIY, A.D., doktor tekhn.nauk; SOLOV'YEV, I.I., doktor tekhn.nauk; STUPEL' F.A., kand.tekhn.nauk; TALITSKIY, A.V., prof.; TEMNIKOV, P.Ye., kand.tekhn.nauk; FEDOROV, L.I., inzh.; FEDOSEYEV, A.M., doktor tekhn.nauk; KHOLYAVSKIY, G.B., inzh.; CHECHET, Yu.S., doktor tekhn.nauk; SHNEYBERG, Ya.A., kand.tekhn.nauk; SHUMILOVSKIY, N.H., doktor tekhn.nauk; ANTIK, I.B., red.; MEDVEDEV, L.Ya., tekhn.red.

[The history of power engineering in the U.S.S.R. in three volumes]  
Istoriia energeticheskoi tekhniki SSSR v trekh tomakh. Moskva, Gos. energ. izd-vo.

(Continued on next card)

ALEKSANDROV, A.G.--(continued) Card 2.

Vol.2. [Electric engineering] Elektrotehnika. Avtorskii kollektiv  
toma: Aleksandrov i dr. 1957. 727 p. (MIRA 11:2)

1. Moscow. Moskovskiy energeticheskiy institut. 2. Chlen-korrespon-  
dent AN SSSR (for Larionov)  
(Electric engineering)

VENIKOV, V.A., doktor tekhn.nauk, prof.

Electrical power engineering. Trudy MMI no.26:3-8 '57. (MIRA 11:9)

1. Dekan elektroenergeticheskogo fakul'teta [KEF] Moskovskogo ordena  
Lenina Energeticheskogo instituta.  
(Electric engineering)

VENIKOV, V.A.

**AUTHORS:** Venikov, V.A., Doctor of Technical Sciences, 105-9-2/32  
Professor, Fedorov, D.A., Candidate of Technical Sciences

**TITLE:** Concerning the Use of Compensated Synchronous Compensators  
(K voprosu o primeneniі kompensirovannykh sinkhronnykh kompensatorov)

**PERIODICAL:** Elektrichestvo, 1957, Nr 9, pp. 10-13 (USSR)

**ABSTRACT:** One of the measures which make the increase of the static stability of long distance circuits possible is the use of synchronous compensators in intermediary substations. The power of synchronous compensators necessary for this purpose can be reduced at the cost of a connection in series of static condensers. The authors show that compensation by capacity can be useful although it is no universal means for the improvement of transmissivity. The authors also show that the basic problem which should be dealt with is not the struggle with self-excitation and -oscillation, which can be removed, but the obtaining of an effective compensation in comparison with the automatic control of a greatly effective excitation and the investigation of the possibilities of an automatic control of excitation in the presence of capacity. A use of compensation through capacity is also not impossible in the case of synchronous compensators in relation to a small power in a system with low voltage.

Card 1/2

105-9-2/32

Concerning the Use of Compensated Synchronous Compensators.

There are 6 illustrations and 6 Slavic references.

SUBMITTED: June 16, 1957

AVAILABLE: Library of Congress

Card 2/2

VENIKOV, V.A., doktor tekhn.nauk, prof.

Wider use of physical modeling for the solution of electrical engineering problems. Trudy MEI no.26:38-58 '57. (MIRA 11:9)

(Electric engineering--Models)

VENIKOV, V.A., doktor tekhn.nauk, prof.; FEDOROV, D.A., kand.tekhn.nauk

Using compensated synchronous compensators in electric systems.  
Trudy MEI no.26:59-74 '57. (MIRA 11:9)  
(Electric power distribution)

VENIKOV, V.A., doktor tekhn.nauk, prof.; ZHUKOV, L.A., kand.tekhn.nauk, dots.;  
SIUDA, I.P., kand.tekhn.nauk, dots.

Making the characteristics of long-distance electric lines more exact  
by evaluating the efficiency of their performance. Trudy MEI no.26:  
75-96 '57.

(Electric lines)

(MIRA 11:9)

VENIKOV, V.A., doktor tekhn.nauk, prof.; BORODULINA, L.P.

Determining time constants of electric circuits by means of  
nomograms. Trudy MEI no.26:236-238 '57. (MIRA 11:9)  
(Electric circuits) (Nomography (Mathematics))

VENIKOV, V. A. 110-12-10/19  
AUTHOR: Venikov V.A., Doctor of Technical Sciences, Professor,  
Tsov'yanov, A.M., Engineer, and Khudyakov, V.V., Candidate  
of Technical Sciences.  
TITLE: New Sources of Reactive Power that Can be Used to Improve  
the Utilisation of Generators and Synchronous Compensators.  
(Novyye istochniki reaktivnoy moshchnosti, pozvolyayushchiye  
uluchshit' ispol'zovaniye generatorov i sinkhronnykh  
kompensatorov)

PERIODICAL: Vestnik Elektromyshlennosti, 1957, Vol.28, No.12,  
pp. 59 - 64 (USSR)

ABSTRACT: The cost of alternators and synchronous compensators is  
higher than that of static capacitors and reactors. However,  
static capacitors and reactors are usually not flexible enough  
to replace synchronous compensators. The latter can be cheapened  
by simplification of the field system, but cannot normally  
operate at high lagging reactive power. Valve-operated  
exciter circuits such as illustrated in Fig.1 help to improve  
matters. Changes in the region of stability that result from  
changes in the generator parameters are shown in Figs. 2 and 3.  
It is claimed that the use of electronic-ionic field regulators  
with high-speed regulating systems can greatly improve the  
Card1/4 operating conditions of synchronous compensators. Capacitance

New Sources of Reactive Power Can be Used to Improve the  
Utilisation of Generators and Synchronous Compensators

110-12-16/19

placed in series with the compensator winding reduces by 50-80% the transient impedance of the synchronous compensator, and thus improves its dynamic and static stability for given field currents as shown in Fig.4. To make the best use of static capacitors combined with machines, it is necessary to be able to introduce the static capacitors smoothly. Until recently, this was impossible. However, capacitance can be controlled by including synchronous compensators in parallel or series with the capacitors, the synchronous machines being of relatively small output. Schematic diagrams are given in Fig.6. Such circuits call for relatively high control power but this can be reduced by connecting a capacitance in parallel with the controlled circuit, as shown in Fig.8. Brief mathematical expressions are given for the power in the various parts of the circuit and were verified by special experiments. It still remains to develop a practical rectifier-inverter scheme for the control of capacitors, and a possible circuit shown in Fig.9. The rectifier-inverter set consists of ordinary grid-controlled mercury-arc rectifiers. In operation the rectifier-inverter consumes reactive power and has a very small active load. Analytical expressions are given for the reactive power. It is shown that regulation of the reactive

Card2/4

110-12-16/19

New Sources of Reactive Power that Can be Used to Improve the  
Utilisation of Generators and Synchronous Compensators

power consumed by the rectifier-inverter set occurs because of change in the currents through the rectifier and inverter transformers. A variant of the circuit given in Fig.9 is that given in Fig.11. The circuit consists of two separate rectifiers, each of which operates in short circuit on a smoothing choke. The method of operation of the circuit is explained. Rectifiers and inverters should be very reliable in circuits such as have been described, which can also be used to realise Taylor's proposal to stabilise a transmission line. Here, special series-parallel transformers convert the capacitive current of the line and the corresponding reactive power into reactive power to compensate the reactive voltage drop in the line; Fig.12A shows the scheme.

The authors, having re-examined the distribution of sources of reactive power within a transmission system, also consider the possibility of using such devices to relieve generators of reactive power. The use of alternators to generate reactive power has developed historically but other approaches are now possible. For example, a circuit such as that shown in Fig.13 could be used. Moreover, with alternative sources of reactive power, it would be possible to use asynchronous generators in

Card3/4

110-12-16/19

new Sources of Reactive Power that Can be Used to Improve the  
Utilisation of Generators and Synchronous Compensators.

in power stations.

The article does not claim to describe developed industrial designs; it is based only on preliminary theoretical investigations verified on a laboratory scale and is presented to promote discussion. Details of the circuit proposed may be questionable, and certainly need serious development, but, undoubtedly, electronic-ionic techniques, automatic control and capacitor manufacture are now sufficiently advanced to make possible the introduction of new elements into heavy current technology.

There are 13 figures and 5 references, 2 of which are Slavic.

ASSOCIATION: MEI and VEI

AVAILABLE: Library of Congress.

Card 4/4

PHASE I BOOK EXPLOITATION 939

Venikov, Valentin Andreyevich

Elektromekhanicheskiye perekhodnyye protsessy v elektricheskikh sistemakh (Electromechanical Transients in Electrical Systems)  
Moscow, Gosenergoizdat, 1958. 488 p. 9,650 copies printed.

Ed.: Yeskov, V.V.; Tech. Ed.: Larionov, G.Ye.

PURPOSE: This textbook is intended for students of power engineering and electrical engineering vuzes. It may also be useful to scientists and engineers of electric power stations and systems and design organizations.

COVERAGE: The book provides basic information concerning the physical aspects of electromechanical transient processes occurring in electrical systems. The Introduction and Part 1 describe the basic theoretical aspects and characteristics of electrical systems and the components which determine the mechanics of electromechanical transient processes. In Part 2 the author explains the basic meth-

Card 1/11

Electromechanical Transients in Electrical Systems 939

ods of calculation employed in analysing transient processes in electrical systems. He describes the small oscillations method and the algebraic and frequency criteria used in this method of analysis. In the analysis of large variations, he explains methods of integrating equations and, in particular, methods of successive intervals. Considerable space is devoted to problems of high-response regulation, resynchronization, self-synchronization, switching-on without checking synchronism, and other modern methods of increasing the carrying capacity and reliability of electrical systems. Part 3 is devoted to methods of increasing system reliability and stability. In addition, the author describes various other measures dealing with changes in the parameters of basic equipment, optimum circuits, control methods and various operational problems. He pays special attention to long-distance electrical transmission. The book is based partly on lectures delivered by the author during the past 15 years at the Moscow Power Engineering Institute on the subjects of "Stability of Electrical Systems", "Transients in Electrical Systems", "Electrical Systems", and "Special Problems of Electrical Systems". It also draws on present scientific research and exper-

Card 2/11

Electromechanical Transients in Electrical Systems 939

lence in the design and operation of electrical systems. The author thanks the following persons for their help in preparing and reviewing the manuscript: V.G.Kholmskiy, N.A.Mel'nikov, V.V.Yezhkov, and Ya.Z.Tsipkin. There are 96 references, of which 91 are Soviet, 2 English, 2 Chinese, and 1 French.

TABLE OF CONTENTS:

Preface	3
Introduction	9
1. Subject and basic concepts	9
2. General characteristics of transient processes and the approach to their study	14

Card 3/11

Electromechanical Transients in Electrical Systems 939

Part 1. FUNDAMENTALS OF THE THEORY

Ch. 1. Characteristics of Components of Electrical Systems	21
1. The electrical network and basic properties of its components	21
2. Power distribution in a complex system	27
3. Excitation systems for generators and synchronous condensers	35
4. Characteristics of synchronous generators and condensers in a simple electrical system	54
5. Characteristics of prime movers for generators in electrical systems	69
6. Load characteristics of electrical systems	80
7. Behavior of a complex load in electrical systems during transient processes. Load stability. Voltage avalanche	88

Card 4/11

Electromechanical Transients in Electrical Systems 939

Ch. 2. Changes in Operating Conditions During Large Disturbances and Small Changes in Speed	
1. The problem and basic assumptions	94
2. Motion equations in a nondimensional form	94
3. Application of the area method for investigating the relative motion of generator rotors	102
4. Solution of differential equations of relative motion	108
5. Calculation of a transient process in a complex system containing an arbitrary number of stations and loads	125
6. Frequency variation in power systems	140
	142
Ch. 3. Changes in Operating Conditions During Large Disturbances and Large Changes in Speed	
1. General characteristics. Basic equations	161
2. Falling out of synchronism and steady asynchronous running	161
3. Area method for large slips	167
4. Resynchronization and self-synchronization of synchronous generators operating asynchronously at above synchronous speed	170
	172

Card 5/11

Electromechanical Transients in Electrical Systems 939

- 5. Resynchronization and self-synchronization of synchronous generators operating at various initial speeds. Mathematical analysis 178
- 6. Application of successive intervals for calculating the resynchronization process in generators 180
- Ch. 4. Transient Processes in Electrical Systems During Small Deviations from Steady Run Conditions and During Small Changes in Speed 188
  - 1. Stating the problem. Basic assumptions and initial statements 188
  - 2. Equation of small deviations in an uncontrolled system and analysis of static stability 194
  - 3. Methods of determining the character of the roots of an equation without direct solution 208
  - 4. Investigation of static stability of a simple controlled system by using the small oscillations method 222
  - 5. Investigation of static stability of simple systems having a high-response regulation of excitation 239

Card 6/11

Electromechanical Transients in Electrical Systems 939

6. Investigation of static stability of complex systems having a high-response regulation system 261
7. General evaluation of stability in systems having regulation of excitation 268
8. Investigation of the behavior of an electrical system during continuously occurring small shocks 272

Part 2. CALCULATIONS OF TRANSIENT PROCESSES IN ELECTRICAL SYSTEMS

- Ch. 5. Simplified (Practical) Calculations of Static Stability in Electrical Systems 275
  1. General considerations on the possibility of a single method of investigating regulated and unregulated systems 275
  2. Simplified (practical) criteria of stability and possibilities for their application 277
  3. Checking static stability by the simplified criterion  $dP/d\delta_0$  in simple systems 282
  4. Comparison of stability and capacity limits 289

Card 7/11

Electromechanical Transients in Electrical Systems 939

5. Checking stability by the simplified criterion  $dP/d\delta$  in complex branched systems 291
6. Checking stability by the criterion  $dQ/dU < 0$  in concentrated systems with nodal points 296
7. Checking by the criterion  $dP/d\delta < 0$  in a system with a load strongly dependent on frequency 298
8. Recommendations for calculating static stability 298

- Ch. 6. Practical Calculations of Dynamic Stability in Electrical Systems 302
1. Stating the problem 302
  2. Design and operational calculations of dynamic stability which take into account the effect of automatic control of excitation and speed 304
  3. Precise calculations of dynamic stability 312
  4. Calculation of dynamic stability when an inverter is included in the transmission line 319
  5. Recommendations for calculating stability and determining safety factor 322

Card 8/11

Electromechanical Transients in Electrical Systems 939

Ch. 7. Automation in the Analysis of Transient Processes When Calculating and Controlling the Conditions of Electrical Systems	325
1. Methods of investigating electrical systems	325
2. Network analyzer for electrical systems	329
3. Analog computer for electrical systems	339
4. Application of electronic digital computers for analyzing transients	360
5. Application of computers for automating electrical systems and controlling transients	370

Part 3. IMPROVEMENT OF CARRYING CAPACITY AND STABILITY OF ELECTRICAL TRANSMISSION LINES AND ELECTRICAL SYSTEMS

Ch. 8. General Statement of the Problem	372
Ch. 9. Improving the Characteristics of Basic Components of Electrical Systems	
1. Generators	374
2. Synchronous condensers	374
Card 9/11	393

Electromechanical Transients in Electrical Systems 939

- 3. Transformers 394
- 4. Circuit breakers 394
- 5. Electrical transmission lines 396

Ch. 10. Additional Measures for Improving Stability 436

- 1. Grounding the neutral of transformers through resistances as a method of improving stability 436
- 2. Electrical braking of generators during breakdowns 439
- 3. Effect of turbine regulation on stability 444
- 4. Mechanical braking of water-wheel generators 449

Ch. 11. Measures of an Operational Character for Improving Stability and Increasing Reliability of Electrical Systems

- 1. Stating the problem 451
- 2. Operational circuits of electrical systems 453
- 3. Division of electrical systems as a means of preserving dynamic stability 455

Card 10/11

Electromechanical Transients in Electrical Systems	939
4. Effect of power reserve on transient processes and stability	456
5. Cutting off some of the generators and reactors as a means of increasing stability of a system	457
6. Operation of machines in electrical systems during large slips as a means of securing resultant stability	458
Appendixes	473
Basic Symbols	481
Bibliography	483
Alphabetical Index	487

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12-23-58

Card 11/11

VENIKOV, V. A.

AZAR'YEV, D. E., VENIKOV, V. A., MAMIKONYANTS, L. G. and SIROMYATNIKOV, I. A.

Increase of Reliability of Operation of Power Systems and Long Distance Power Transmission

paper submitted for presentation at the Intl. Conf. on Large Electric Systems (CIGRE) 17th Biennial Session, Paris, France, 4-14 June 1958.

Electra, No. 30, Nov 57, periodical news letter issued by the CIGRE, Paris France.

VENIKOV, V.A.

Problems in modern automatic control of electric systems. Nauch.  
dokl. vys. shkoly; energ. no.1:5-11 '58. (MIRA 11:10)  
(Electric controllers)

VENIKOV, V.A.

VENIKOV, V.A., doktor tekhn.nauk, prof.; MARKOVICH, I.M., doktor  
tekhn.nauk.

Trip to England of the representatives of the Soviet committee  
of SIGRE. Elektrichestvo no.1:93-94 Ja '58. (MIRA 11:2)  
(Great Britain--Electric engineering--Congresses)

VENIKOV, V.A.

Accuracy problem in physical modeling. Nauch. dokl. vys. shkoly;  
energ. no.1:197-200 '58. (MIRA 11:10)

1.Kafedra elektricheskikh setey i sistem Moskovskogo energeticheskogo  
instituta.

(Engineering models)

VENIKOV, V.A.; ASTAKHOV, Yu.N.

Methods for technical and economical analysis of the expediency of  
long-distance electric power transmission. Nauch. dokl. vys. shkoly;  
energ. no.2:63-68 '58. (MIRA 11:11)  
(Electric power distribution)

VENIKOV, V. A.  
KOSTENKO, M.P., akademik; ZAVALISHIN, D.A., prof.; SHCHEDRIN, N.N., doktor  
tekhn. nauk; SALITA, P.Z., inzh.; VAZHN OV, A.I., kand. tekhn. nauk,  
doks.; ROZOVSKIY, Yu.A., kand. tekhn. nauk; MARCHENKO, Ye.A., kand.  
tekhn. nauk.; POLYAK, G.I., inzh; VENIKOV, V.A., doktor tekhn. nauk, prof.

Dynamic models of power systems. Elektrichestvo no.2:78-85 F '58.

(MIRA 11:2)

1. Nauchno-issledovatel'skiy institut postoyannogo toka (for Schedrin,  
Salita, Vashnov, Rozovskiy, Marchenko, Polyak). 2. Chlen-korrespondent  
AN Uzbekskoy SSR (for Shchedrin). 3. Moskovskiy energeticheskiy  
institut (for Venikov).

(Electric networks)

VENIKOV, V.A.

Effect of deep voltage regulation of long-distance superhigh-tension electric power lines on technical and economic efficiency of their performance. Nauch.dokl.vys.shkoly; energ. no.3:93-98 '58. (MIRA 12:1)

1. Kafedra elektricheskikh setey i sistem Moskovskogo energeticheskogo instituta.  
(Electric power distribution--High tension)

VENIKOV V. A.

105-58-4-20/37

AUTHORS: Markovich, I. M., Doctor of Technical Sciences  
Libkind, M. S., Candidate of Technical Sciences

TITLE: On Dynamic Models of Power Systems (O dinamicheskikh modelyakh energosistem)

PERIODICAL: Elektrichestvo, 1958, Nr 4, pp. 73 - 74 (USSR)

ABSTRACT: This is a discussion on the article by I. S. Bruk in Elektrichestvo, 1958, Nr 2. Pointing at the book by V. A. Venikov and A. V. Ivanov-Smolenskiy "Physical Modelling of Electric Systems", 1956, GEI publication, and referring to some paragraphs from this book the author is of opinion that dynamic models can be used in the investigation of various problems as well as for teaching aids. It is useless from the viewpoint of technical possibilities as well as of expenses to compare the dynamic models as means for the quantitative investigation with the electrical network analyzer and with numerical machines before the problem of the accuracy in the carrying out of various calculations by means of the dynamic models will be completely explained. As regards the universal numeric-

Card 1/2

105-58-4-20/37

On Dynamic Models of Power Systems

al machines their use for the calculation of the operation of energy systems will be extended, other devices being replaced to a certain extent.

ASSOCIATION: Energeticheskiy institut im. Krzhizhanovskogo Akademii nauk  
SSSR  
(Institute for Power Engineering imeni Krzhizhanovskiy AS  
USSR)

AVAILABLE: Library of Congress

1. Electrical systems-Modelling

Card 2/2

SOV110-58-7-19/21

AUTHOR: Professor Venikov, V.A., Dr. Tech. Sci., Tsov'yanov, A.N., Engineer, and Khudyakov, V.V., Cand. Tech. Sci.

TITLE: On the question of new sources of reactive power that may be used to improve the utilisation of generators and synchronous condensers.  
(K voprosu o novykh istochnikakh reaktivnoy ~~mo~~shchnosti, pozvolyayushchikh uluchshit' ispolzovaniye generatorov i sinkhronnykh kompensatorov)

PERIODICAL: Vestnik Elektromyashlennosti, 1958, Nr 7, pp 66-70. (USSR)

ABSTRACT: This is a general reply to discussions, including that published with the article in Vestnik Elektromyashlennosti Nr 12, 1957, and those published in this number. Most contributors consider the proposed system promising although practical verification of the circuits is not yet complete and economic considerations cannot yet be fully worked out. Likewise it is still premature to make the economic evaluation proposed by certain contributors, but

Card 1/4

SOV/110-58-7-19/21

On the question of new sources of reactive power that may be used to improve the utilisation of generators and synchronous condensers.

an approximate economic assessment is given in an Appendix. Tests have shown that the controlled valves in the a.c. circuit are the controlling link and can alter the instant of application of voltage and the time of flow of current in the circuit during each cycle. Oscillograms have shown that over-voltages and valve overloading do not occur when the regulation is being applied to reactive power in circuits with active or inductive impedance. It is very desirable that the Moscow Power Institute, the All-Union Electrotechnical Institute and others should go into the whole question. The article gives only the fundamentals and laboratory models of the circuits proposed for the installation, and of course further development is required. Nevertheless the proposed method is promising. Certain variants of the circuit that have been proposed in the discussion have obvious defects, but some other remarks are very helpful. Harmonic analysis of the current in a

Card 2/4

SOV/110-58-7-19/21

On the question of new sources of reactive power that may be used to improve the utilisation of generators and synchronous condensers.

controlled reactor is given in Fig. 2, it assumes that the angle of regulation is zero and that the valves are fully conductive. This analysis shows that in practice it will only be necessary to compensate for the third harmonic. Yenin and Libkind very correctly suggested other possible ways of achieving the desired object. However, a disadvantage of devices involving sub-magnetisation of transformers or reactors is the rather large time-constant, which must be greater than that of an ionic valve compensator; therefore, circuits with controlled valves are preferable. Libkind's proposal to reduce the time-constant of sub-magnetisation is worthy of attention. Yenin's proposal to use a double-bridge circuit will complicate the equipment and increase losses; moreover, Yenin's equipment can only operate over a limited range of power-factor. Nevertheless, these two circuits are both worth further careful study. Many of the objections raised by Academician M.P. Kostenko, Professor D.A. Zavalishin and Candidate of Technical Science I.A. Glebov, result from incorrect consideration of the circuit

Card 3/4

SOV/110-58-7-19/21

On the question of new sources of reactive power that may be used to improve the utilisation of generators and synchronous condensers

proposed, and their objections are met. It is no accident that power engineers are now interested in this question, and early use should be made of the proposed equipment. However, it should be noted that the change in output of reactive power obtained by changing only the characteristics of a controlled reactor or transformer cannot ensure the necessary balance of reactive power in a system: the development of an ionic compensator is a separate and important task, which can be solved. Only the use of inertialess reactive power can make electric power systems stable. The advantages of ionic compensators are again summarised. An appendix contains an approximate cost estimate for an ionic compensator compared with a synchronous condenser and it is shown that they are about the same. There are 4 figures, and 2 references both of which are Soviet.

Card 4/4

1. Capacitors--Performance
2. Generators--Performance
3. Power supplies--Sources

ASTAKHOV, Yu.N.; ZUYEV, E.N.; VENIKOV, V.A., doktor tekhn. nauk,  
prof., red.

[Methods for determining similitude criteria; lecture  
on a course in "Cybernetics of electrical systems"]  
Sposoby opredeleniia kriteriev podobii; leksiia po  
kursu "Kibernetika elektricheskikh sistem" Moskva,  
Mosk. energ. in-t, 1964. 27 p. (MIRA 18:1)

VERETENNIKOV, Leonid Perfir'yevich; POTAPKIN, Aleksandr Ivanovich;  
RAIMOV, Mikhail Mikhaylovich; VERIN, V.A., doktor tekhn.  
nauk, prof., laureat Leninskoy premii, rektent;  
SHIROKHOV, Ye.I., nauchn. red.; (MOSU), A.V., red.

[Modeling, computer techniques, and transient processes  
in electric ship propulsion systems] Modellirovanie, vychislitel'naya tekhnika i perekhodnye protsessy v sudovykh elektroenergeticheskikh sistemakh. Leningrad, Sudostroenie, 1964. 383 p. (KIRA 18:1)

ANTOSHIN, N.M.; VENIKOV, V.A.; NETMAN, L.R.

Meeting of committee no.1 of the International Electrotechnical  
Commission in Brussels on problems of the international electrical  
engineering dictionary. Elektrichestvo no.7:86-87 J1 '58.  
(Electric engineering--Dictionaries) (MIRA 11:8)

AUTHORS: Venikov, V. A., Veyts, V. I., 307/105-58-7-27/32  
~~Glazunov, A. A.~~, Grudinskiy, P. G.,  
 Probst, A. Ye., Petrov, G. N., Russakovskiy, Ye. A.,  
 Shershov, S. F., Teleshev, B. A.

TITLE: In Memoriam Professor S. A. Kukel' - Krayevskiy, Doctor of  
**Industrial Engineering**; (Pamyati doktora tekhniko-  
 -ekonomicheskikh nauk, prof. S. A. Kukel' - Krayevskogo)  
 On His 75th Birthday ( K 75-letiyu so dnya rozhdeniya)

PERIODICAL: Elektrichestvo, 1958, Nr 7, pp. 91 - 92 (USSR)

ABSTRACT: Sergey Andreyevich Kukel' - Krayevskiy was born on January  
 26th, 1883. He graduated with distinction from the Naval  
 College in St. Petersburg, served in the navy as mine  
 officer, taught mine engineering and carried out research  
 work in the field of wireless telegraphy. He held lectures  
 on the application of electrical engineering in submarines.  
 His first papers on electrical engineering were published  
 from 1908 to 1912. In 1912 he entered the St. Petersburg  
 Polytechnical Institute, he received, however, his certificate,  
 later because of the beginning of the war. In World War I

Card 1/3

In Memoriam Professor S. A. Kukel' - Krayevskiy, SOV/105-58-7-27/32  
 Doctor of Industrial Engineering On His 75th Birthday

he was commander of the submarine fleet and engineer, from 1919 - 1920 base-commandant of the Caspian Fleet, from 1920 to 1921 he taught electrical engineering at the Naval College. After demobilization he was President of the Afghan-Soviet Technical Commission in Afghanistan, from 1922 to 1930 head of the Department of Electrification at the Glavelektro. Since that time till his death in 1941 his activity has been connected with the development of the electrical engineering of the USSR. At the same time he taught at the Institut narodnogo khozyaystva im. Plekhanova (Institute of Economics imeni Plekhanov) and from 1930 on at the Moskovskiy energeticheskiy institut (Moscow Institute of Power Engineering). In 1924 he was the representative of the USSR in London in the First International Conference of Power Engineering. He did scientific work at the Energeticheskiy institut im. G. M. Krzhizhanovskogo (Institute of Power Engineering imeni G. M. Krzhizhanovskiy, AS USSR). He attended actively the conferences on the problems of the Great Volga. He published more than 60 papers and a series of monographs. He died on July 22nd, 1941. There is 1 photograph.

Card 2/3

In Memoriam Professor S. A. Kukel' - Krayevskiy, SOV/105-58-7-27/32  
Doctor of Technical Economics.  
On His 75<sup>th</sup> Birthday

1. Mechanics (Personnel)--USSR

Card 3/3

8(5)

AUTHOR:

~~Venikov, V. A.~~, Professor,  
Doctor of Technical Sciences

SOV/105-58-12-24/28

TITLE:

Letter to the Editor (Pis'mo v redaktsiyu)

PERIODICAL:

Elektrichestvo, 1958, Nr 12, pp 85-85 (USSR)

ABSTRACT:

A misprint in the author's book "Electromechanical Transition Processes in Electric Systems" (Gosenergoizdat, publisher, 1958) namely a formula on page 19 is pointed out and corrected.

Card 1/1

VENIKOV, V.A., doktor tekhn. nauk, prof.

Development of stability in electric systems of the U.S.S.R.  
Trudy MNI no.30:73-97 '58. (MIRA 12:5)

1. Moskovskiy ordena Lenina energeticheskiy institut, Kafedra  
elektricheskikh setey i sistem.  
(Electrification)

VENIKOV, V.A., prof., doktor tekhn.nauk, laureat Leninskoy premii, red.;  
YEZHKOVA, V.V., red.; BORUNOV, N.N., tekhn.red.

[Questions on stability and control of electric systems; reports  
of the International Conference on Electrical Systems, 1958]  
Voprosy ustoiichivosti i regulirovaniia elektricheskikh sistem;  
doklady Mezhdunarodnoi konferentsii po elektricheskim sistemam  
1958 g. Pod red. V.A.Venikova. Moskva, Gos.energ.isd-vo, 1959.  
205 p. (MIRA 12:11)

(Electric engineering)

VENIKOV, V.A.

Laboratory of the Moscow Power Institute for problems in electric systems. Nauch.dokl.vys.shkoly; energ. no.1:5-16 '59.  
(MIRA 12:5)

(Moscow--Electric laboratories)

8(0), 8(5)  
AUTHOR:

Venikov, V. A., Professor, Doctor  
of Technical Sciences

SOV/'05-59-1-23/29

TITLE:

Problems of Stability and Regulation of Electric Systems at  
the International Conference on Large Electric Systems (Voprosy  
ustoychivosti i regulirovaniya elektricheskikh sistem na  
Mezhdunarodnoy konferentsii po bol'shim elektricheskim sistemam)

PERIODICAL:

Elektrichestvo, 1959, Nr 1, pp 89-92 (USSR)

ABSTRACT:

Notes of a participant. The regular meeting of the CIGRE  
(Conférence Internationale des Grands Réseaux Electriques A  
Haute Tension) took place in Paris in June 1958. On the part  
of the USSR, V. A. Venikov, Member of the Committee Nr 13, and  
L. G. Mamikonyants, President of the National Committee of the  
USSR, were taking part in the work. Among 16 reports delivered  
in the 32nd group of the 3rd section were those by D. I.  
Azariyev, V. A. Venikov, L. G. Mamikonyants and I. D.  
Syromyatnikov entitled "Increase of Reliability in the Perform-  
ance of Transmission Systems and Long-Distance Lines". A  
survey is given of the Conference and the reports by non-  
Soviet delegates. There is 1 Soviet reference.

Card 1/1

SOV/24-59-1-27/35

AUTHORS: Venikov, V.A. and Ivanov-Smolenskiy, A.V.

TITLE: Analogues to Hydraulic Turbines in Power System  
Analogues (Criticisms of a Paper in Izvestiya Akademii  
Nauk, SSSR, OTN, Nr 5, 1958 and a reply by the Author  
of the Original Paper) (Zamechaniya k stat'ye  
N.A.Kartvelishvili "O modelirovani gidroturbinnykh  
blokov pri modelirovani energeticheskikh sistem,,)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh  
Nauk, Energetika i Avtomatika, 1959, Nr 1, pp 135-136 (USSR)

ABSTRACT: Objection is taken to some remarks in the earlier paper  
about the lack of proper analogues to the purely  
hydraulic side of the generators in an analogue system  
in use at the Moscow Power Institute. It is pointed  
out that such analogue facilities do in fact exist and  
that the facilities do not extend to the purely  
hydraulic and mechanical aspects of the processes solely  
because the analogue is intended for use in studying the  
purely electrical aspects of the system. It is quite  
possible to design adequate physical analogues to the  
hydraulic shock (water-hammer) and other processes

Card 1/3

SOV/24-59-1-27/35

Analogues to Hydraulic Turbines in Power System Analogues  
(Criticism of a Paper in Izvestiya Akademii Nauk, SSSR, OTN,  
1958, Nr 5, and a reply by the Author of the Original Paper)

on the hydraulic side of the turbines and work on the theory and design of such analogues is in fact in progress though it has, as yet, not had any practical outcome (the principles of the analogues, however, are not even mentioned).

The reply by the author, N.A.Kartvelishvili, of the original paper is divided into two parts. First, a small point about the parameters of analogues is expanded and extended to the pipelines, valves and so forth of the hydraulic plant; second, the new remarks are applied to the formally complete initial equations in the original paper. It is pointed out that, though it is usual to assume that the terms relating to the purely hydraulic side have little effect on the stability, it is nowhere stated under precisely what conditions this assumption is justified. It is concluded that the continually extending use of automatic controls on all parts of power systems will soon force this issue because problems of the most economical use of water power are

Card 2/3

SOV/24-59-1-27/35

Analogues to Hydraulic Turbines in Power System Analogues  
(Criticism of a Paper in Izvestiya Akademii Nauk, SSSR, OTN,  
1958, Nr 5, and a reply by the Author of the Original Paper)

involved. It is claimed that there is no real  
divergence of view on the possibility of designing  
physical analogues to phenomena such as hydraulic shock.  
There is 1 Soviet Reference.

Card 3/3

VENIKOV, V.A.

Operation of long distance electric transmissions under  
optimum voltage conditions. Nauch.dokl.vys.shkoly; energ.  
no.2:5-11 '59. (MIRA 13:1)

1. Rekomendovana kafedroy elektricheskikh sistem Moskovskogo  
energeticheskogo instituta.  
(Electric lines)

VENIKOV, V.A.; ASTAKHOV, Yu.Kh.

Using the theory of analogy in the analysis of power system  
development including a time factor. Nauch.dokl.vys.shkoly:  
energ. no.2:325-334 '59. (MIRA 13:1)  
(Electric engineering)

8(0)  
 AUTHORS: Chilikin, M. G., Larionov, A. N., <sup>SOV/105-59-5-24/29</sup> Venikov, V. A., Chechet,  
 Yu. S., Goryainov, F. A., Drozdov, N. G., Petrov, I. I.

TITLE: Professor G. N. Petrov

PERIODICAL: Elektrichestvo, 1959, Nr 5, pp 91-92 (USSR)

ABSTRACT: This is a short curriculum vitae on the occasion of his 60th birthday and after 35 years of scientific, pedagogic and engineering activity. Petrov was born in May 1899. He finished his studies at the Department of Electrical Engineering of the MVTU (Moscow Higher Technical School) in 1924, and remained then at the Department. From 1924-1941, his main activity was closely connected with the development of transformer building. (VEI (All-Union Electrotechnical Institute) and Moskovskiy transformatornyy zavod (Moscow Transformer Plant)). He solved a number of important theoretical and practical problems. His book entitled "Transformatory" (Transformers) was published in 1934. In 1933 he became Professor, in 1937 he received his degree as a Doctor of Technical Sciences. In 1942 he was granted the honorary title of a Meritorious Scientist and Technician of the RSFSR. For more than 20 years, he conducted the Chair of Electric Machines at the Moskovskiy

Card 1/3

Professor G. N. Petrov

SOV/105-59-5-24/29

ordena Lenina energeticheskiy institut (Moscow Order of Lenin Power Engineering Institute). From 1932-34 he was Dean of the Department of Electric Machine Building, and from 1955-57 Dean of the Department of Electromechanics at the MEI (Moscow Power Engineering Institute). During the war, he was Director of the MEI, and for 12 years Deputy Director for Scientific and Pedagogic Work. He published a lot of papers on electric machine building. He is a Member of the Moskovskoye pravleniye Nauchno-tekhnicheskogo obshchestva energeticheskoy promyshlennosti (Moscow Executive Committee of the Scientific and Technical Society of the Power Industry), and a Member of the Central Executive Committee of the same Society. In 1950 he was elected Deputy of the Moskovskiy gorodskoy sovet deputatov trudyashchikh (Moscow City Council of the Workers' Deputies). He is President of the Provisional Commission for Electric Machines at the CNTK SM SSSR, and a Member of the Uchenyy sovet nauchno-issledovatel'skogo instituta elektropromyshlennosti (Scientific Council of the Scientific Research Institute of Electrical Industry). He is President of the Otdeleniye energeticheskikh i mashinostroitel'nykh nauk nauchno-tekhnicheskogo soveta Ministerstva vysshego obrazovaniya SSSR (Department of Power Engineering and Machine Building Sciences

Card 2/3

Professor G. N. Petrov

SOV/105-59-5-24/29

of the Scientific-technical Council at the Ministry of Higher Education of the USSR) and Chief Editor of the periodical "Nauchnyye doklady vysshey shkoly" for the section "Elektromekhanika i avtomatika", and a member of the editorial staff of the periodical "Vestnik elektropromyshlennosti". For many years he was President of the Experts' Commission of the VAK of Electrotechnics. From 1947-53 he was Chief Editor of the periodical "Elektrichestvo". He bears the following orders: Order of Lenin, "Red Star", "Badge of Honor" and various medals. Twice he received the Stalin Prize for papers on the building of transformers. There is 1 figure.

Card 3/3

8(0)

SOV/105-59-6-22/28

**AUTHORS:**

Chilikin, M. G., Kostrov, M. F., Ven'kov, V. A., Biryukov, V. G.,  
Glazunov, A. A., Butkevich, Yu. V., Razevig, D. V., and Others

**TITLE:**

Leonid Ivanovich Sirotinskiy (Leonid Ivanovich Sirotinskiy)  
On His 80-th Birthday (K 80-letiyu so dnya rozhdeniya)

**PERIODICAL:**

Elektrichestvo, 1959, Nr 6, pp 91-92 (USSR)

**ABSTRACT:**

The scientist and pedagogist, Doctor of Technical Sciences  
Leonid Ivanovich Sirotinskiy was born in April 1879. His career  
in the field of science and teaching began, when in 1907 he  
participated in the establishment of the first junior engineers  
college in Russia (at present Moskovskiy energeticheskoy  
tekhnikum, Moscow Polytechnic of Power Engineering), where  
afterwards he worked for more than 25 years. In 1917 he began  
to work at the Moskovskaya vysshaya tekhnicheskaya uchilishche  
(Moscow Technical University) and later on in the Moskovskiy  
energeticheskoy institut (Moscow Institute of Power Engineering).  
He introduced courses on electrical illumination, electric  
traction, overvoltages and overvoltage protection at the MVTU  
and MEI. Later on he mainly worked in the field of high-voltage  
engineering. He organized the chair of high-voltage engineering

Card 1/3

Leonid Ivanovich Sirotinskiy. On His 80-th Birthday

SOV/105-59-6-22/28

at the MEI and established a laboratory with this chair. In 1921 in collaboration with K. A. Krug he established the Gosudarstvennyy eksperimental'nyy institut (State Experimental Institute), which later on was transformed into the Vsesoyuznyy elektrotekhnicheskii institut imeni Lenina (All-Union Institute of Electrical Engineering imeni Lenin). Sirotinskiy was the first head of the department of high voltages of the VEI. He still is in close contact with the VEI. He was a member of the Tsentral'nyy elektrotekhnicheskii sovet (Central Council for Electrical Engineering). In this function and as a consultant to the Glavenergo he collaborated in giving his expert opinion on the power stations on the Dnepr and the Svir', and on the electric grids in the Donbass. He participated in the discussion on the projects of the 400 kv a.c. line and of the d.c. line Stalingrad hydroelectric power station - Donbass. For many years he was the chairman of the committee for the elaboration of specifications for overvoltage protection. He was a member of the Presidium and deputy chairman of the Elektrotekhnicheskoye obshchestvo (Electrotechnical Society), chairman of the section for power stations at the MONITOE, and for many years he was chairman of the

Card 2/3

Leonid Ivanovich Sirotinskiy. On His 80-th Birthday

SOV/105-59-6-22/28

Nauchno-tekhnicheskoye obshchestvo MEI (Scientific and Technical Society of the MEI). He is at present still a member of the Scientific Councils of the MEI and VEI, member of the Technical Council of the Ministerstvo stroitel'stva elektrostantsiy (Ministry for the Construction of Power Stations). His three-volume textbook "High-Voltage Engineering" is well known. At present he is engaged in re-editing this book. He has been awarded two Lenin Prizes, is a member of the Order of the Red Banner of Labor, of the order "Medal of Distinction" and of several medals. In 1942 the title of a Merited Scientist and Engineer of the RSFSR was conferred upon him, and in 1950 he was awarded the Stalin Prize for his work on valve arresters. There is 1 figure.

Card 3/3

8 (2)

**AUTHORS:**

Venikov, V. A., Doctor of Technical Sciences, Professor, Fedorov, D. A., Candidate of Technical Sciences, Docent SOV/105-59-11-22/32

**TITLE:**

Reply to a Remark Made by Yu. A. Rozovski

**PERIODICAL:**

Elektrichestvo, 1959, Nr 11, p 85 (USSR)

**ABSTRACT:**

This is a reply to a remark made by Yu. A. Rozovski in Elektrichestvo, 1959, Nr 11, pp 84-85 (present periodical) concerning the paper published by the authors in Elektrichestvo, 1957, Nr 9. In the Moskovskiy energeticheskiy institut (Moscow Institute of Power Engineering) and in the Teploelektroproyekt experiments were made to clarify the advantages and disadvantages of compensated synchronous compensators? Also a special damping system with a higher time constant to suppress self-excitation was investigated. In the aforementioned paper of the two authors this measure is regarded as being more general and simpler and, as was shown experimentally, its efficiency is satisfactory. The complication of the machine construction proposed in Yu. A. Rozovski's remark and in his paper (Ref 2) written in collaboration with Ye. A. Marchenko and V. A. Andreyuk solely for the purpose

Card 1/2

Reply to a Remark Made by Yu. A. Rozovskiy

SOV/105-59-11-22/32

of suppressing self-excitation is judged uneconomical. The authors emphasize the advantages of fitting small damping resistors into the stator circuit and they are of opinion that the criticism of experimentally and analytically proved factors is not sufficiently substantiated. According to the authors the positive influence on the stability of the synchronous compensator is obvious, since a machine with lower capacity and increased excitation flux offers better conditions than a machine with increased capacity. Furthermore it is said that in heavy breakdowns compensation does not improve dynamic stability. The authors are also of opinion that the compensated synchronous compensators exhibit essential drawbacks and that before they are used a technical and economic comparison should be made with other constructions of the same type. There are 6 Soviet references.

Card 2/2

8 (0)

AUTHORS:

SOV/105-59-11-27/32

Kostenko, M. P., Kulebakin, V. S.,  
Trapeznikov, V. A., Venikov, V. A., Goloban, A. T., Morozov, D. P.,  
Syromyatnikov, I. A., Drozdov, N. G., Petrov, I. I., Basharin,  
A. V., Sokolov, M. M., and others

TITLE:

Professor M. G. Chilikin. On His 50th Birthday and His 25th  
 Year of Scientific, Engineering, and Pedagogical Activity

PERIODICAL:

Elektrichestvo, 1959, Nr 11, p 91 (USSR)

ABSTRACT:

Professor Mikhail Grigor'yevich Chilikin is Director of the  
 Moskovskiy Ordena Lenina energeticheskii Institut (Moscow Order  
 of Lenin Institute of Power Engineering) and a specialist in  
 the field of electric drive. Professor M. G. Chilikin wrote  
 his dissertation for his application as Candidate of Technical  
 Sciences in 1938, in 1951 he was appointed professor and in  
 1954 he obtained the degree of a Doctor of Technical  
 Sciences. Since 1951 he has taught at the Kafedra "Elektro-  
 oborudovaniye promyshlennykh predpriyatiy" (Chair for  
 Electrical Equipment of Industrial Enterprises) of MEI. He held  
 lectures on electric drives and dealt with the construction of  
 electric drive systems. In 1952 he became head of the afore-  
 mentioned institute. He issued ninety papers on teaching ✓

Card 1/2

Professor M. G. Chilikin. On His 50th Birthday and His 25th Year of Scientific, Engineering, and Pedagogical Activity SOV/105-59-11-27/32

methods in universities, on scientific problems of electric drives and electrification. His books are well known among workers and university students. M. G. Chilikin is President of the Nauchno-tekhnicheskii komitet po avtomatizirovannomu elektroprivodu i primeneniyu elektricheskikh mashin (Scientific and Technical Committee for Automated Electric Drives and the Use of Electrical Machines), President of the sektsiya energo-vooruzheniya Tekhsoveta Gosplana SSSR (Section for the Energy Equipment of the Technical Council of the Gosplan USSR), Member of the Editorial Council of the Gosenergoizdat (State Power Engineering Publishing House), Member of the Board of Editors of the periodical "Elektrichestvo". He was a member of the Plenum of a rayon Committee of the CPSU, and four times delegate in the Mossovet (Moscow Soviet). He received the Order of the Red Banner of Labor and other awards. There is 1 figure.

Card 2/2

8 (6), 28 (1)  
AUTHORS:

SOV/105-59-12-4/23  
Venikov, V. A., Doctor of Technical  
Sciences, Professor, Soldatkina, L. A., Candidate of  
Technical Sciences, Docent (Moscow)

TITLE:

On the Criteria of Quality of Electric Power and the  
Automatic Control in the Operation of Power Networks

PERIODICAL:

Elektrichestvo, 1959, Nr 12, pp 21-25 (USSR)

ABSTRACT:

The development of power networks and their automation demands the establishment of clear criteria of the quality of the network operation. These qualitative criteria must be probability integral criteria. As such they must consider the duration and size of the deviation and the probability of the occurrence of one or another deviation of a certain duration. The first successful attempt of establishing an integral criterion is that recommended by P. Ailleret (Ref 2). This one infers the size of voltage at the consumer's end. By applying this criterion and by studying the conditions at which it can be used one may proceed to establish general criteria for the operational quality. The article contains the description made by Ailleret and the method used in France for solving these tasks. The authors demand that the integral

Card 1/2

On the Criteria of the Quality of Electric Power and the Automatic Control at the Operation of Power Networks SOV/105-59-12-4/23 ✓

voltmeters used in France, should be produced and used in the distributor nets to gather the experience needed for the operation by the aid of Ailleret's criterion. There are 2 figures and 5 references, 1 of which is Soviet.

SUBMITTED: September 9, 1959

Card 2/2

VENNIKOV, V.A., doktor tekhn.nauk, prof.

Investigating and exposing the problem of the stability of  
electric system loads. Izv.vys.ucheb.sav.; energ. 2 no.11:  
1-12 N '59. (MIRA 13:4)

1. Moskovskiy ordena Lenina energeticheskiy institut,  
Predstavlena kafedroy elektricheskikh sistem.  
(Electric power plants--Load)

VENIKOV, V.A., prof., doktor tekhn.nauk, laureat Leninskoy premii, red.;  
ASTAKHOV, Yu.M., red.; TSUKERNIK, L.V., red.; LARIONOV, O.Ye.,  
tekhn.red.

[Use of computers in electric power systems; collection of  
translated articles] Primenenie schetno-reshaiushchikh ustroystv  
v elektricheskikh sistemakh; sbornik perevodnykh statei pod red.  
V.A.Venikova. Moskva, Gos.energ.izd-vo, 1960. 215 p.  
(MIRA 14:1)

(United States--Electronic computers)  
(United States--Electric power distribution)

VENIKOV, V.A., doktor tekhn.nauk, prof.

Development of electric power systems in the country's electrification plans. Trudy MEI no.33:139-164 '60. (MIRA 15:3)  
(Electric power distribution) (Electrification)

VENIKOV, Valentin Andreyevich; ANISIMOVA, N.D., red.; VORONIN, K.P.,  
tekhn. red.

[Long-distance electric power transmission systems; special  
problems] Dal'nie elektroperedachi; spetsial'nye voprosy.  
Moskva, Gos. energ. izd-vo, 1960. 311 p. (MIRA 15:1)  
(Electric power distribution)



88143

S/019/60/000/023/099/116  
A154/A027

26.2190

AUTHORS: Venikov, V.A., Ivanov, V.G., Mironov, B.V.

TITLE: A Device for Limiting Overloads in Cases of Aircraft Autopilot Failures

PERIODICAL: Byulleten' izobreteniy, 1960, No. 23, p. 62

TEXT: Class 62b, 14<sup>01</sup>. No. 134141 (663546/40 of April 13, 1960). This device for limiting overloads in cases of aircraft autopilot failure is distinguished by the fact that, in order to reduce the range of control surface displacements from the balanced position in case of autopilot failure, additional limit switches are connected in series into the circuits of the extreme position limit switches of the autopilot steering mechanism. These additional limit switches are controlled by a rotary cam which is connected with the control system via an electromagnetic coupling connected into the feed circuit of the autopilot. When the autopilot is switched on, the cam is retained by means of springs in the neutral position, while the cam is so

Card 1/2

38143

S/019/60/000/023/099/116  
A154/A027

A Device for Limiting Overloads in Cases of Aircraft Autopilot Failures

shaped that deviation of the control surface from the balanced position does not exceed the minimum amounts needed for carrying out evolutions and combatting external disturbances. X

Card 2/2

VENIKOV, V. A., GERISENBERG, Grigoriy N., KOSIMOV, M. F., REIMAN, I. M., SOKOLOV, N. I.

"Excitation control of synchronous machines in power systems of the Soviet Union"

report to be submitted for Intl. Conference on Large Electric Systems (CIGRE),  
18th Biennial Session, Paris, France, 15-25 Jun 60.

VENIKOV, Valentin Andreyevich, prof., doktor tekhn.nauk, laureat  
Leninskoy premii; ISLANKINA, T.F., red.; SAVCHENKO, Ye.V.,  
tekhn.red.

[Consolidated electric power system of the U.S.S.R.] Edinaya  
energeticheskaya sistema SSSR. Moskva, Izd-vo "Znanie," 1960.  
46 p. (Vsesoiuznoe obshchestvo po rasprostraneniю politicheskikh i nauchnykh znaniy. Ser.4, Nauka i tekhnika, no.32).  
(MIRA 13:12)

(Interconnected electric utility systems)

VENIKOV, V.A., doktor tekhn.nauk, prof.

Effect of raising the power factor of a load on its stability. Elektrichestvo no.6:6-10 Ja '60. (MIRA 13:7)

1. Moskovskiy energeticheskiy institut.  
(Condensers (Electricity)) (Electric driving)

CHILIKIN, M.G.; SIROTINSKIY, L.I.; VENIKOV, V.A.; UL'YANOV, S.A.;  
GRUDINSKIY, P.G.; FEDOSEYET, A.M.; SOLOV'YEV, I.I.; DROZDOV, N.G.;  
SYROMYATNIKOV, I.A.

Aleksandr Aleksandrovich Glazunov; obituary. Elektrichestvo  
no.8:88-89 Ag '60. (MIRA 13:8)  
(Glazunov, Aleksandr Aleksandrovich, 1891-1960)

MARKOVICH, I.M., doktor tekhn.nauk; TAFT, V.A., doktor tekhn.nauk;  
SOVALOV, S.A., kand.tekhn.nauk; VENIKOV, V.A., doktor tekhn.  
nauk; TSUKERNIK, L.V., kand.tekhn.nauk

Present-day use of computers in designing and operating electric  
power systems. Elektrichestvo no. 11:1-8 N '60. (MIRA 13:12)

1. Energeticheskiy institut AN SSSR (for Markovich, Taft & Sovalov).
2. Moskovskiy energeticheskiy institut (for Venikov). 3. Institut  
elektrotekhniki AN USSR (for Tsukernik).  
(Electronic calculating machines)  
(Electric power)

VENIKOV, V.A., prof., laureat Leninskoy premii, doktor tekhn.nauk

Automatic control of electric systems. Izv. vys. ucheb. zav.;  
energ. 3 no. 9:1-8 S '60. (MIRA 13:9)

1. Moskovskiy ordena Lenina energeticheskiy institut. Predstavlena  
kafedroy elektricheskikh sistem.  
(Automatic control) (Electric power distribution)

VENIKOV, V.A., prof., doktor tekhn.nauk, laureat Leninskoy premii;  
GORSKIY, Yu.M., inzh.; LEDYANSKIY, D.P., dotsent, kand.tekhn.nauk

Use of an electromechanical filter in generator re-synchronization systems. Izv. vys. ucheb. zav.; energ. 3 no. 12:1-8 D '60.  
(TIRA 14:2)

1. Moskovskiy ordena Lenina energeticheskiy institut.  
Predstavlena kafedroy elektricheskikh sistem.  
(Electric filters) (Electric generators)

9/143/60/000/009/001/006  
A189/A026

AUTHOR: Venikov, V.A., Lenin Prize Laureate, Doctor of Technical Sciences,  
Professor

TITLE: Cybernetics of Electric Systems

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Energetika, 1960, No. 9,  
pp. 1 - 8

TEXT: The author discusses the application of cybernetics to the design and operation of electrical power systems. Cybernetics, as applicable to the power systems, should comprise the following three branches: 1) Interaction study of the system elements as an integral unity; 2) theory of obtaining and transmitting information; 3) development of the power system theory. The scope within each branch is given. The subject "Cybernetics of Electric Systems" has been included by the author into the project of the teaching plan "Electric System", in the specialty "Electric Power Plants and Systems".

ASSOCIATION: Moskovskiy ordena Lenina energeticheskiy institut (Moscow "Order of Lenin" Power Engineering Institute)

Card 1/2

Cybernetics of Electric Systems

S/143/60/000/009/001/006  
A189/A025

PRESENTED: Kafedra elektricheskikh sistem (Department of Electric Systems)

SUBMITTED: May 5, 1960

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Card 2/2

MARKOVICH, I.M., doktor tekhn.nauk; TAFT, V.A., doktor tekhn.nauk;  
SOVALOV, S.A., kand.tekhn.nauk; VENIKOV, V.A., doktor tekhn.nauk;  
TSUKERNIK, L.V., kand.tekhn.nauk

Problems on the use of computers in designing and operating  
electric power systems. Elektrichestvo no. 12:9-15 D '60.  
(MIRA 14:1)

1. Energeticheskiy institut AN SSSR (for Sovalov). 2. Moskovskiy  
energeticheskiy institut (for Venikov). 3. Institut elektrotekh-  
niki AN USSR (for TSukernik).

(Electronic calculating machines)  
(Electric power plants)